

# Racial Disparities in Non-fatal injuries of Nebraska Motor Vehicle Accidents from 2004 to 2008

## Joint Public Health Data Center

Although racial differences in fatal injuries of motor vehicle crash accidents are well known, it is unknown whether racial differences exist in non-fatal injuries of motor vehicle crash accidents. This project explored the racial disparities in non-fatal injuries of Nebraska motor vehicle crash accidents occurring from 2004 to 2008. Nebraska highway crash data from 2004 to 2008 were linked to the Nebraska driver's license data and the Nebraska death data using Crash Outcomes Data Evaluation System (CODES) provided by Nation Highway Traffic Safety Administration (NHTSA). Since only 50% of the crash data have race values and racial disparity is the focus of this study, this study was limited on the drivers involved in highway vehicle crash accidents. Categorical data analysis and Logistic regression model were used to analyze the data. It was found that African American and American Indian drivers involved in highway crash accidents had higher non-fatal injury percentages than other racial drivers, 32.1% and 31.7% respectively, compare with 24.7% of white drivers. The results showed that multi-vehicle accidents cause higher risk of non-fatal injuries than single vehicle accidents and urban areas have more multiple vehicle accidents than rural areas. 94.7% of African American drivers involved in vehicle accidents mainly live in urban area compared to 66.7% of white drivers. 90.5% of African American drivers were involved in multi-vehicle accidents while 81.7 % of white drivers were involved in multi-vehicle accidents. American Indian drivers have high alcohol drinking percentages and high percentages of speeding, over-steering, and failure to keep in lane. The non-fatal injury probability of the drivers involved in vehicle accidents was significantly related to race, seatbelt use, speed limit, road surface type, gender, crash location, crash type, driver condition, driving manner, alcohol drinking, and vehicle type.